A New Genus and Two New Species of Sticholotini (Coleoptera:Coccinellidae) from South America

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The new genus described herein falls in the Sticholotinae as defined by Sasaji (1968). The narrow terminal segment of the maxillary palpus, widely spaced mesocoxae, cryptotetramerous tarsi, and elongate triangular female genital plates place it in this subfamily. *Nexophallus*, new genus, belongs in the tribe Sticholotini and is most nearly related to the Old World genus *Sticholotis* Crotch. *Sticholotis* has 11-segmented antennae, incomplete postcoxal lines, and always symmetrical male genitalia. *Nexophallus* has 10-segmented antennae, complete postcoxal lines, and symmetrical or asymmetrical male genitalia. In Pope's (1962) key to the genera of the Pharini (Sticholotini), *Nexophallus* goes to couplet 2, *Plotina* Lewis, from Japan, which has 11-segmented antennae.

Other Western Hemisphere genera thus far recognized as belonging to the Sticholotinae have a different habitus and perhaps should be placed in a tribe other than the Sticholotini. These genera, such as *Microweisea* Cockerell and *Coccidophilus* Bréthes, are characterized by their minute size, elongate-oval form, clypeus elongate in front of eyes and emarginate laterally for antennal insertion, and postcoxal line in two parts, one extending nearly to lateral margin of first abdominal sternum along anterior margin, the other extending downward nearly to hind margin of first abdominal sternum, then outward toward lateral margin. *Sticholotis, Nexophallus* and related genera are usually larger, very round and convex, clypeus not or very slightly elongate in front of eyes and not always emarginate laterally for antennal insertion, and postcoxal

Thanks must go to Hugh Leech, California Academy of Sciences for the loan of the type series of *Nexophallus semiglobus*, n. sp.

Nexophallus, new genus

Body round, extremely convex; dorsum faintly pubescent. Head broad, clypeus short, anterior margin trunate; eye small, situated on lateral margin of head; antenna inserted under anterior angle of clypeus immediately anterior to eye, 10-segmented, club 3-segmented, apical segment largest (fig. 4); labrum short, narrower than clypeus; maxillary palpus nearly as long as antenna, terminal segment strongly narrowing apically; mandible bidentate at apex, a small tooth at basal angle (fig. 7); Labial palpus ventrally articulated, terminal segment narrowing apically, basal segment very small (fig. 5). Pronotum deeply emarginate anteriorly, anterior angles produced, rounded. Scutellum small, triangular. Elytron with lateral margin sinuate, distinctly margined; elytral epipleura slightly descending externally, broad basally, narrowing toward apex, not reaching apex of elytron, not foveate for reception of femora. Underside of body nearly flat, not foveate for reception of any femora. Prosternum with

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Fig. 1, Nexophallus semiglobus, dorsal view. Fig. 2, Nexophallus rufoglobus, dorsal view. Fig. 3, Nexophallus rufoglobus, lateral view.

a small anterior lobe, posterior projection rectangular, widely separating the procoxae. Mesosternum broadly articulated with metasternum, mesocoxae widely separated, anterior margin slightly concave. Legs long, apex of femur extending beyond outer margin of body, all femora swollen and grooved for reception of tibiae; all tibiae thickened medially; tarsus cryptotetramerous, a very small segment present between the second and terminal segments; tarsal claws weakly toothed basally (figs. 9, 10, 11). Abdomen with 5 visible sterna; first sternum with complete postcoxal lines (fig. 8). Female genitalia with genital plates elongate triangular with .a stylus present (fig. 18). Male genitalia with parameres shorter than basal lobe, strongly sclerotized, symmetrical or asymmetrical.

Type species, Nexophallus semiglobus, n. sp.



Figs. 4-8, Nexophallus semiglobus: 4, antenna; 5, labium; 6, maxilla; 7, mandible; 8, abdomen.



Figs. 9-11, Nexophallus semiglobus: 9, front leg; 10, middle leg; 11, hind leg.

Figs. 12-14, Nexophallus rufoglobus, J genitalia: 12, sipho; 13, 14, phallobase, ventral and lateral views.



Figs. 15-18, Nexophallus semiglobus, genitalia: 15, sipho; 16, 17, phallobase, ventral and lateral views; 18, Q genital plates.

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KEY TO SPECIES OF NEXOPHALLUS

Dorsal surface black; median area of first abdominal sternum with large setigerous

punctures _______semiglobus, n. sp. Dorsal surface rufous; median area of fist abdominal sternum with very fine setigerous punctures ______rufoglobus, n. sp.

Nexophallus semiglobus, n. sp.

(Figs. 1, 4, 5, 6, 7, 8, 9, 10, 11, 15, 16, 17, 18)

Holotype male.-Length 2.00 mm., width 1.80 mm. Form strongly convex, head not visible in dorsal view (fig. 1). Dorsal surface with sparse pubescence; head and pronotum with pubescence white, short, appressed; elytral pubescence yellow, long, erect. Dorsal surface entirely black, labrum and antenna yellowish brown; underside reddish brown, legs slightly darker. Head shining, faintly alutaceous, densely punctured, punctures separated by one or two times their diameter; eyes small, widely spaced, separated by four times the width of an eye. Pronotum shining, faintly alutaceous, densely punctured, punctures equal to head punctures and separated by one or two times their diameter. Elytra shining, not alutaceous, not densely punctured, large and small punctures present, separated by two or three times the diameter of a large puncture; epipleura with an internal carina above the inner margin. Underside of head with coarse reticulate punctures; antenna short, extending to basal angle of pronotum, inserted dorso-laterally between anterior margin of eye and mandible; maxillary palpus long, terminal segment longer than two previous segments (fig. 6). Prementum narrow posteriorly, mentum deeply emarginate anteriorly, narrowing posteriorly (fig. 5). Prosternum with intercoxal process and anterior lobe with very large, deep reticulate punctures, a short seta rising from the center of each puncture, two widely divergent carinae present laterally, posterior broadly margined. Mesosternum with intercoxal area strongly margined anteriorly, an uneven row of coarse setigerous punctures across the intercoxal area. Metasternum with coarse setigerous punctures scattered throughout, postcoxal line reaching lateral margin. Legs with setae scattered throughout (figs. 9, 10, 11). Abdomen with postcoxal lines complete, reaching two-thirds the distance to hind margin of first sternum, abruptly curving upward to anterolateral margin, median area of first sternum with large setigerous punctures (fig. 8). Genitalia with parameres slightly shorter than basal lobe, sides sinuate, left paramere slightly shorter than right paramere; basal lobe split from median point to apex, in ventral view the right half curved with apex rectangular, the left half curved with inner anterior corner of apex ending in a blunt projection, left half with a membranous lobe on inner margin near apex and a strong angulate projection dorsally on outer margin (figs. 16, 17); sipho long, a wide membranous area present from near base to near median point, apex sharp, curved downward, a long attenuate apical process rising laterally near apex (fig. 15).

Female.—Similar to male. Genital plates long, triangular, dark colored in apical third, distinct stylus present at apex (fig. 18).

Variation.—Size is constant in type series, one paratype paler in color, slightly teneral. Holotype.—Ecuador; 2.8 mi. N. of Puyo, Napo Pastaza, 953 m., II-9-1955, E. I. Schlinger
& E. S. Ross collectors (California Academy of Sciences).

Paratypes.—Same data as holotype, 4 deposited in California Academy of Science Collection, 2 in USNM collection.

Nexophallus rufoglobus, n. sp.

(Figs. 2, 3, 12, 13, 14)

Holotype male.—Length 2.10 mm., width 1.90 mm. Form strongly convex, head not visible in dorsal view (figs. 2,3). Dorsal surface with sparse pubescence; head and pronotum with pubescence yellowish white, short, appressed; elytral pubescence yellow, long, erect.

Dorsal surface entirely rufous, labrum and antenna yellow; underside rufous, legs, maxilla and labium yellow. Head shining, faintly alutaceous, densely punctured, punctures separated by their diameter or less; eyes small, widely spaced, separated by slightly less than four times the width of an eye. Pronotum shining, faintly alutaceous, finely punctured, large and small punctures present, separated by two or three times the diameter of a large puncture. Underside of elytra coarsely reticulate, reticulation visible in dorsal view; epipleura with an internal carina above the inner margin. Underside of head with coarse reticulate punctures; antenna short, extending to basal angle of pronotum, inserted dorso-laterally between anterior margin of eye and mandible; maxillary palpus long, terminal segment longer than two previous segments. Prosternum with intercoxal process and anterior lobe with large, reticulate, setigerous punctures, two widely divergent carinae present laterally, posterior broadly margined. Mesosternum with intercoxal area strongly margined anteriorly, coarse setigerous punctures scattered across intercoxal area. Metasternum with coarse setigerous punctures scattered throughout, postcoxal lines reaching lateral margin. Legs with setae scattered throughout. Abdomen with postcoxal lines complete, reaching over one-half the distance to hind margin of first sternum, abruptly curving upward to antero-lateral margin, median area of first sternum with fine setigerous punctures scattered across median area. Genitalia with parameres shorter than basal lobe, sides sinuate, equal in length; basal lobe split in apical one-third, each half with sides sinuate, tapering to a blunt point (figs. 13,14); sipho short, a wide membranous area present from near base past median point, apex acuminate, straight (fig. 12).

Female.—Similar to male except genitalia. Genital plates long, triangular, dark colored in apical third, distinct stylus present at apex.

Holotype.—Bolivia; Rurrenabaque, Rio Beni, Oct., WM. Mann, Mulford Biol. Exp., 1921-1922 (USNM 70410).

Paratype.—Bolivia; Lower Rio Madidi, Feb., WM. Mann, Mulford Bio. Expl., 1921-22; 1, in USNM collection.

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Pachyonychis Clark and Pachyonychus Melsheimer: Nomenclatural Confusion

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There has been much confusion over the past 100 years with the generic names Pachyonychis Clark, Pachyonychus Melsheimer, Hamletia Crotch, and Clarkaltica Weise. This confusion has even extended to the authorship of Pachyonychis and Pachyonychus. This paper attempts to clarify this situation.

The generic name *Pachonychus* attributed to Chevrolat first appeared in the third edition of the Dejean Catalogue (1837), with the species *P. dimidiaticornis* Dejean listed under it. Neither the genus nor the species was described and thus both must be considered *nomina nuda*.

In 1847, Melsheimer described a species which he questionably assigned to *Pachyonychus* "Chevrolat". He named this species *P. paradoxus*. Although this